

**TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A SUBMISSION UNDER 35 U.S.C. 371**

1002-REG-41 PCT/PTA 19 MAY 2005  
17638-006US1 INTEU/P29548US

U.S. APPLICATION NO. (If known, see 37 C.F.R. 1.5)

**10/535532**

INTERNATIONAL APPLICATION NO.  
PCT/GB2003/005057

INTERNATIONAL FILING DATE  
20 November 2003

PRIORITY DATE CLAIMED  
22 November 2002

**TITLE OF INVENTION**

Thermal Energy Management in Electrochemical Fuel Cells

**APPLICANT(S) FOR DO/EO/US**

Peter David Hood, John Philip Mitchell, Paul Leonard Adcock and Jonathan Cole

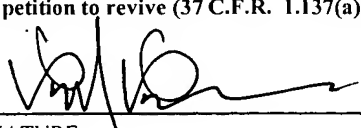
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a submission under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a submission under 35 U.S.C. 371.
3. ☐ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.
4. ☐ The US has been elected (Article 31).
5. ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2))
  - a. ☒ is attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ has been communicated by the International Bureau.
  - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☐ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
  - a. ☐ is attached hereto.
  - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
  - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ have been communicated by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☒ have not been made and will not be made.
8. ☐ An English language translation of amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☐ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10. ☐ An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

**Items 11 to 20 below concern document(s) or information included:**

11. ☒ An Information Disclosure Statement under 37 C.F.R. 1.97 and 1.98.
12. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 C.F.R. 3.28 and 3.31 is included.
13. ☒ A preliminary amendment.
14. ☐ An Application Data Sheet under 37 C.F.R. 1.76.
15. ☐ A substitute specification.
16. ☐ A power of attorney and/or change of address letter.
17. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 C.F.R. 1.821 - 1.825.
18. ☐ A second copy of the published international application under 35 U.S.C. 154(d)(4).
19. ☐ A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).
20. ☒ Other items or information:  
International Search Report

**CERTIFICATE OF MAILING BY EXPRESS MAIL**  
Express Mail Label No. EV 664066672 US  
Date of Deposit: May 19, 2005

U.S. APPLICATION NO. <b>107535532</b>		INTERNATIONAL APPLICATION NO. <b>JP2004-000571</b>		ATTORNEY'S DOCKET NUMBER <b>17638-006US1</b>	
<b>19 MAY 2005</b> JC20 Rec'd in PTO					
The following fees have been submitted				<b>CALCULATIONS PTO USE ONLY</b>	
21. <input checked="" type="checkbox"/> Basic national fee ..... \$300				\$300.00	
22. <input checked="" type="checkbox"/> Examination fee If International preliminary examination report prepared by USPTO and all claims satisfy provisions of PCT Article 33(1)-(4) ..... \$100				\$200.00	
All other situations ..... \$200					
23. <input checked="" type="checkbox"/> Search fee Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority ..... \$100				\$400.00	
International Search Report prepared and provided to the Office ..... \$400					
All other situations ..... \$500					
<b>Total of 21, 22 and 23 =</b>				<b>\$900.00</b>	
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number)	RATE		
-100 =	/50 =		X \$250	\$0.00	
Surcharge of \$130 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 C.F.R. 1.492(h)).				\$0.00	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total Claims	19 - 20 =		x \$50	\$0.00	
Independent Claims	2 - 3 =		x \$200	\$0.00	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$360	\$0.00	
<b>TOTAL OF ABOVE CALCULATIONS =</b>				<b>\$0.00</b>	
<input type="checkbox"/> Applicant claims small entity status. See 37 C.F.R. 1.27. Fees above are reduced by 1/2.				\$0.00	
<b>SUBTOTAL =</b>				<b>\$900.00</b>	
Processing fee of \$130 for furnishing the English Translation later than 30 months from the earliest claimed priority date (37 C.F.R. 1.492(i))					
+				\$0.00	
<b>TOTAL NATIONAL FEE =</b>				<b>\$0.00</b>	
Fee for recording the enclosed assignment (37 C.F.R. 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 C.F.R. 3.28, 3.31). \$40.00 per property					
+				\$0.00	
<b>TOTAL FEES ENCLOSED =</b>				<b>\$900.00</b>	
				Amount to be refunded:	\$0.00
				Amount to be charged:	\$0.00
a. <input checked="" type="checkbox"/> A check in the amount of \$900.00 to cover the above fees is enclosed. b. <input type="checkbox"/> Please charge my Deposit Account No. 06-1050 in the amount of \$0.00 to cover the above fees. A duplicate copy of this sheet is enclosed. c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 06-1050. A duplicate copy of this sheet is enclosed. d. <input type="checkbox"/> Fees are to be charged to a credit card. <b>WARNING:</b> Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.					
NOTE: Where an appropriate time limit under 37 C.F.R. 1.495 has not been met, a petition to revive (37 C.F.R. 1.137(a) or (b) must be filed and granted to restore the International Application to pending status.					
SEND ALL CORRESPONDENCE TO:					
PTO Customer No: 26161		 SIGNATURE			
		Paul A. Pysher			
		NAME			
		40,780			
		REGISTRATION NUMBER			